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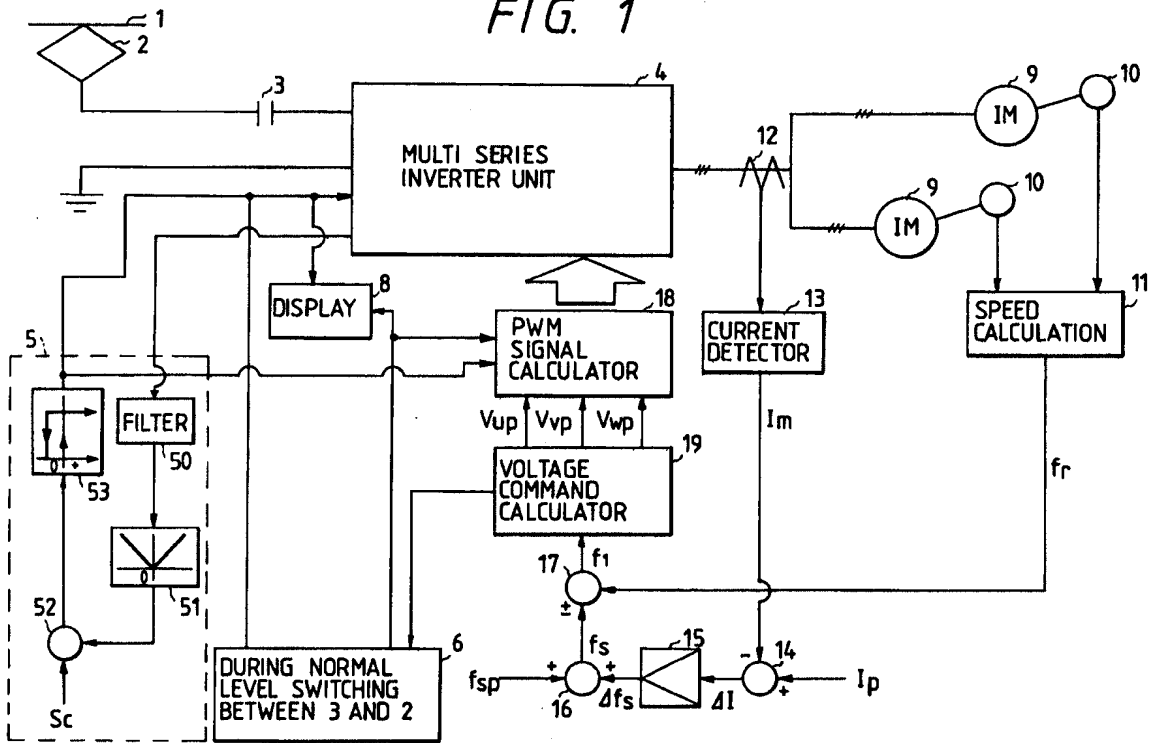
(54) **Inverter arrangement and AC motor driving system.**

(57) In a multi series pulse width modulation inverter arrangement, an inverter arrangement which can continue the inverter operation, in particular, by preventing an overcurrent caused by an erroneous firing of a switching element therein is provided. The multi series inverter arrangement is constituted to be operative in three level mode and in two level mode. Even when an erroneous firing thereof due to noise is generated, the operation of the inverter unit (4) can be continued, the overcurrent due to the erro-

neous firing is eliminated, the present inverter arrangement can be used under a severe noise environment and outputs an AC output having a small amount of higher harmonics, moreover when the inverter arrangement is operating under a three level mode in a low efficiency region, the operating mode of the inverter arrangement is positively switched from the three level mode to the two level mode, thereby the operating efficiency of the inverter arrangement is enhanced.

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FIG. 1





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## EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	PESC '89 RECORD 26 June 1989, MILWAUKEE pages 672 - 682 MARCHESONI 'high performance current control techniques for applications to multilevel high power voltage source inverters' * page 2, left column, paragraph 4 * ---	6	H02M7/527 B60L9/22
A	FOURTH INT. CONF. ON POWER ELECTRONICS AND VARIABLE-SPEED DRIVES 17 July 1990, LONDON pages 98 - 103 STEINKE 'PWM control of three-level inverter' * page 99, right column * ---	1-5	
A	3RD EUROPEAN CONFERENCE ON POWER ELECTRONICS AND APPLICATIONS EPE '89 9 October 1989, AACHEN pages 1267 - 1272 STEINKE 'switching frequency optimal PWM control of a three-level inverter' *introduction* -----	1-5	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			H02M B60L
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 08 OCTOBER 1992	Examiner GENTILI L.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document	

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